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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
Review of the Section 251	)	**CC Docket No. 01-339,**
Unbundling Obligations of	)	**No. 96-98 &**
Incumbent Local Exchange Carriers	)	**No. 98-147**

REPLY DECLARATION OF MICHAEL E. LESHER ON BEHALF OF AT&T CORP.

I. BACKGROUND

1. My name is Michael E. Lesher. My business address is 900 Routes 202/206 North, Room 2A101, Bedminster, NJ 07921. I am employed by AT&T as a Division Manager in the Local Services and Access Management Organization ("LSAM"). My current duties in that position, as well as my educational and career background information, are set forth in my initial Declaration, submitted jointly with Robert J. Frontera, that was filed on April 5, 2002, in this proceeding ("Lesher/Frontera Dec.").

II. INTRODUCTION AND SUMMARY

2. The purposes of this Reply Declaration are to: (1) detail the fundamental economic, business, and regulatory reasons that have affected, and continue to affect, AT&T's decision to build out its network using its own facilities (transport and switching) as opposed to obtaining facilities from the Incumbent Local Exchange Carriers ("ILECs") or alternate sources; (2) explain the impediments AT&T has faced, and continues to face, to such self-deployment; (3) describe AT&T's plans for deployment going forward; and (4) explain why access to unbundled

transport facilities at reasonable prices and under reasonable operating conditions will continue to be critical to AT&T's ability to develop its own network and compete for customers.

3. In addition, I will address the proposals by SBC and Qwest for a "trigger" that would govern the removal of competing local exchange carriers' ability to obtain unbundled transport facilities from ILECs in some circumstances. As I show, the SBC and Qwest proposals are exceedingly overbroad and do not address the real-world circumstances that determine whether or not a competing local exchange carrier ("CLEC") would be impaired without access to unbundled network elements ("UNEs") in the form of unbundled loops or transport.

4. Finally, I briefly address the ILECs' claim that UNE-P deters CLECs from investing in their own facilities. I also explain some of the business considerations that go into AT&T's decision to migrate customers from UNE-P to its own facilities, including the need for: (1) a satisfactory loop cutover process; (2) reasonable loop hot cut charges; (3) sufficient customer and traffic volumes in new areas to justify investment in facilities needed to serve customers over UNE-L; (4) the need for available collocation space, as well as reasonable costs for collocation and related power and HVAC requirements; as well as (5) cost-effective ILEC interoffice transmission functionality (a) between the customer's serving wire center and AT&T's collocation cage, (b) between AT&T collocations, (c) from AT&T hub collocations to AT&T's network switch, and (d) between AT&T's collocation cage and the ILEC end office for purposes of terminating minutes of use (*i.e.*, interconnection trunking).

III. TRANSPORT

A. Local Network Economics

5. The extent to which CLECs are, and will continue to be, significantly impaired in their ability to compete without access to unbundled transport and switching, as well as what "triggers" might be appropriate for requiring CLECs to self-supply such facilities, cannot be divorced from the context of the contrasting economics of local network provisioning for CLECs and ILECs, respectively.

6. All local networks, whether ILEC or CLEC, are designed and implemented in accordance with well-understood telecommunications networking principles. One of these principles is to substitute switching and shared trunking for a multiplicity of direct connections and, wherever economically practical, to share facilities not only among many users, but also among many services. Equally important, efficient network design must account for the fact that different types of transmission facilities exhibit quite different cost characteristics at different levels of usage.

7. The ILECs' existing local networks were built in accordance with these principles from the "bottom up", and exhibit substantial economies of both scale and scope. By "bottom up," I mean that as monopoly providers, the ILECs could provide – indeed were required to provide – loop connections to *all* customers in any serving area. They could then assume, for network design and planning purposes, that all of the traffic from those loops would be available to fill transport facilities between their local serving offices ("LSOs"), between those LSOs and any tandem switches, and finally between those LSOs or tandems and any interexchange service switches or Points of Preserve ("POPs"). Moreover, the traffic that could

be used to fill the ILECs' transport facilities included both local exchange and interexchange (long distance) traffic. Further, because they were assured of carrying high volumes of traffic, the ILECs could (and can) extend their local networks to new areas, or add additional capacity to meet expanded traffic needs, at low incremental cost. Finally, through rate-of-return ratemaking, the ILECs were effectively guaranteed recovery of the capital costs reasonably incurred to construct their networks.

8. By contrast, as described in more detail in the Reply Declaration of Anthony Giovannucci and Anthony Fea ("Giovannucci/Fea Reply Dec."), CLECs' much smaller local networks have had largely to be built from the "top down." Unlike ILECs, CLECs are not able to assume that they will have any particular proportion of the traffic from the loops served by any particular LSO. Put another way, CLECs do not -- and can never expect to -- "own" an entire local exchange with customers' loops already connected to their switches. Instead, they must extend their networks (through lease or construction) down to such serving areas from their POPs or centralized local switches, with the hope, but with no guarantee, that they will attract sufficient customers and traffic to fill those facilities and make them economic. Further, again in contrast to ILECs, CLECs have not been guaranteed a rate of return on the capital they need to invest in their top-down networks. As a result, CLECs do not enjoy the type of scale and scope economics exhibited by the ILECs' networks, and cannot hope economically to duplicate the ILECs' transport facilities except in unusual circumstances where a CLEC can aggregate enough traffic to achieve scale economies approaching those of the ILECs. As I will shortly discuss, this situation is limited for the most part to large capacity facilities used to transport traffic from a point of aggregation to an AT&T local switch.

9. The ILECs' inherent scale and scope advantages have been further magnified by the ILECs' ability, also with assurance of sufficient traffic and rate-of-return capital recovery, to install fiber facilities virtually throughout their transport networks. Because the ILECs' loop plant shares many of the structures and rights-of-way ("ROW") of the interoffice transport facilities, it is relatively easy and very cost-effective for ILECs to deploy fiber into their loop plant, as has been occurring at an accelerated pace for more than a decade. As a result, on almost any route over which a CLEC might consider deploying its own transport facility, the ILEC *already* has deployed fiber transmission facilities, and already is operating those facilities to serve volumes of traffic that are orders of magnitude larger than the CLEC could likely expect to serve. Further, the ILECs not only have fiber interconnecting virtually all of their LSOs, either directly or indirectly, but also they have considerable dark fiber in those same fiber cables. Because of the high costs of construction (chiefly the cost of the supporting infrastructure for the cable, such as structures, placement, ROWs, and the like), the cost of laying a fiber conductor having one strand is not much less than the cost of laying a fiber conductor with dozens of strands. Accordingly, the ILECs typically deploy the largest sized conductor that is practically useable, in order to minimize the likelihood of ever having to build a new facility route between the same two points. Thus, the ILECs can dramatically increase capacity on most routes simply by adding terminating electronics at relatively minimal incremental costs.

10. What this means is that with the exception of certain specific, high-demand point-to-point routes, CLECs cannot realistically hope to achieve the per-unit cost of the ILECs' transport. Because of these severe economies of scale and scope, a CLEC must have multiple DS-3s of anticipated traffic before it can even consider deploying transport facilities

between two points in competition with an ILEC. And the lower the aggregated bandwidth the CLEC requires between the two end points, the more severe is its unit cost disadvantage compared to the ILEC.

11. The ILECs' insurmountable cost advantage is confirmed by the fact that CLECs have very often found it necessary to purchase special access (at supracompetitive prices) in order to generate revenue, rather than incur the financial risk of having a facility with capacity that cannot be reasonably utilized (due, among other things, to the current use and commingling restrictions) and that would represent a unit cost many multiples of that enjoyed by its ILEC competitor. For such reasons, AT&T currently has special access circuits to approximately 11,500 of the over 14,000 ILEC LSOs where customer loops are terminated. (Lesher/Frontera Dec., ¶ 33). And for fully 70 percent of these LSOs, AT&T has insufficient traffic to fill a *single* DS-3 facility to reasonable levels of utilization to carry its substantial long distance traffic. (Giovannucci/Fea Reply Dec., ¶¶ 17-18). Most CLECs, of course, do not have the long distance traffic that AT&T does and would therefore have even less ability to self-deploy fiber to any given LSO. The result is that without access to UNEs, the CLECs likely will deploy smaller networks and serve fewer customers using costly special access (particularly lower capacity special access services).

12. These fundamental realities that reflect the tremendous disparities between the scale and scope economies enjoyed by the ILECs, as compared to the CLECs, must serve as the foundation for any consideration of whether CLECs would be severely impaired in their ability to offer service without access to unbundled dedicated transport as a UNE.

B. Build-Out of AT&T's Local Networks

13. The way AT&T's local networks have been designed is described in detail in the Giovannucci/Fea Reply Declaration. Typically, an efficient network configuration hubs and combines low-capacity facilities onto larger, and more efficient facilities, regardless of the nature of the communications carried, so as to reduce the cost of all services. Under AT&T's existing practices, all traffic from individual customers is moved from the customer premises to the local serving office (generally either by DS-0 or DS-1 facilities), where it is combined (multiplexed) with other traffic onto a higher capacity facility (*e.g.*, a DS-3) and then either directly connected to the AT&T network or routed to an AT&T collocation within another ILEC LSO. From this LSO, if sufficient traffic volumes exist, AT&T may be able to install its own transport to connect to the AT&T local switch in a reasonably efficient manner. But because traffic volumes are often insufficient, and because of additional factors that adversely affect transport unit costs, a large proportion of the traffic to AT&T local switches must be carried on transport facilities leased from the ILECs.

14. This network design, which conforms to long-understood engineering and traffic planning principles, requires three types of transmission facilities to reach an end user customer from a centralized AT&T local switch (such as a Lucent 5ESS or a DMS100 switch) for what AT&T refers to as Type II access.[1] The first is transport between a centralized AT&T

[1] As explained in my initial Declaration(Lesher/Frontera Dec., ¶¶ 18-19), it is only in rare cases that AT&T can justify providing "Type I" access, under which it would serve all of its customers' demands in a building using its own facilities. Those conditions are that (1) an AT&T fiber ring must pass sufficiently close to a building with sufficient customer demand to merit a fiber extension (and the associated transmission equipment); (2) the conditions must be conducive to facilities construction (*e.g.*, AT&T must be able to acquire necessary ROW and a (continued . . .)

switch and an ILEC LSO with collocation. The second is between the LSO with collocation and the end user's serving wire center. The third, the loop facility, is between the end-user's LSO and the customer's premise.

15. The reasons AT&T's local networks have had to be "constructed" largely using facilities leased from the ILECs (as UNEs or as special access facilities) are the fundamental economic realities described in the previous section. Because of these economic realities, except for the rare instances when Type I access is feasible, neither AT&T nor any other CLEC can come close to matching the ILECs' economies of scale and scope, except in the circumstances described below.

16. My initial Declaration described the limited circumstances under which AT&T can reasonably deploy its own facilities for transport between an AT&T switch and an ILEC LSO used for collocation purposes. In essence, AT&T can economically deploy fiber only from a centralized AT&T local switch directly to the few individual LSOs where it has substantial demand or, more typically, to an AT&T hub collocated in an ILEC LSO. At locations where (1) there is sufficient customer demand; (2) the distance to an AT&T ring is relatively short; *and* (3) AT&T is able to obtain diverse entry routes into the ILEC LSO, AT&T deploys optical transmission equipment that connects the collocation to an AT&T fiber facility, which in turn carries the traffic to its switch. As I pointed out, in order for AT&T even to begin

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permit from the locality to build the facility, and the building landlord must consent to the deployment of equipment in the common space of a building, or at least permit the use of "risers" within the building to access a specific customer's floor); and (3) the customer must be willing and able to wait to place that demand onto the newly deployed facility. (*See also* Giovannucci/Fea Reply Dec., ¶¶ 29-37, 40-41).

considering deploying its own fiber to a collocation, AT&T must be able to fill such a facility – which would be at least an OC-48 – to a utilization level of **[proprietary begin]** *** **[proprietary end]**. Otherwise, its unit costs would be far too high compared to those of the ILECs. (Lesher/Frontera Dec., ¶ 21).

17. Whether and when these conditions will exist cannot be divorced from the practical ability to aggregate, and the costs to aggregate, sufficient traffic to make such deployment feasible. As I also pointed out in my initial Declaration and as made clear above, the vast majority of AT&T's collocations do not in fact have the requisite level of traffic to deploy AT&T's own transport facilities. Accordingly, in order to aggregate sufficient levels of traffic to utilize its own fiber transport between an AT&T centralized local switch and an AT&T hub, AT&T must typically hub traffic from **[proprietary begin]** ***** **[proprietary end]** "non-hub" collocations to a hub collocation. These non-hub collocations are linked to a hub collocation via a relatively high capacity facility that is leased from the ILEC. (*Id.*, ¶ 22). This strategy increases the footprint that AT&T can serve. Unfortunately, the cumulative impact of (1) the practical lack of EELs because of use and commingling restrictions, (2) the inflated costs introduced by forced substitution of special access for UNEs, and (3) the inability reasonably to meet demand at low volume locations (because of impairments in accessing voice-grade access loops), have made the strategy exceedingly difficult if not impossible to operationalize.

18. Because of the ability to aggregate traffic in this manner to form a larger footprint, transport between an AT&T hub collocation and an AT&T centralized local switch has the greatest likelihood of being self-deployed, because larger, more efficient, and economical

fiber can be utilized. Even in these situations, however, AT&T has in fact found it economical to deploy its own transport from its switches to only about one-third of its collocations. (*Id.*, ¶ 27).

19. As the logic of this network design and these economies dictates, AT&T is still heavily dependent on the ability to lease ILEC-owned transmission facilities, including so-called high-capacity fiber-based facilities, to fill-out its network and aggregate traffic. This is particularly true of loop facilities, transport facilities between the customer's serving wire center and AT&T's collocations, and transport facilities between the LSOs that are non-hub collocations and AT&T hubs. It is economically impractical, and extraordinarily difficult, for AT&T or any other CLEC to deploy its own transmission facilities in these situations. It should also be understood that in most cases there really are no competitive alternatives (*i.e.*, non-ILEC sources) for such transport facilities. (Lesher/Frontera Dec., ¶ 40; Fea/Taggart Use Restriction Dec., ¶¶ 9-20; Giovannucci/Fea Reply Dec., ¶¶ 24-58). Thus, for the foreseeable future, the only means for AT&T to establish an economically viable facilities-based presence in local markets is to lease ILEC transmission facilities.

20. Equally important, notwithstanding AT&T's use of leased special access loops and transport to aggregate traffic, the facilities AT&T has deployed are significantly under-utilized. This under-utilization extends all the way up from the digital loop carriers ("DLCs") AT&T deploys in its collocations to obtain access to unbundled loops, to the self-deployed transport running to AT&T hubs.

21. AT&T's investment in DLCs, for example, has often been substantially under-utilized. The approximately **[proprietary begin]** ***** **[proprietary end]** DLCs that AT&T has deployed in its network have a total capacity of **proprietary begin]** *******

[proprietary end] lines, *i.e.*, they can handle up to **[proprietary begin]** ******* **[proprietary end]** unbundled loops. At present, however, despite years of effort by AT&T to provision service via unbundled loops, the DLCs have an overall utilization in the range of **[proprietary begin]** **** **[proprietary end]**. (Lesher/Frontera Dec., ¶ 54).

22. Even when combined with traffic originating on the higher capacity DS-1 leased loops, AT&T's collocations are substantially under-utilized. AT&T's 3/1 multiplexers, which take DS-1 traffic from the "back" of the DLCs as well as from DS-1 customer loops terminating at the collocation and multiplex the combined traffic to a DS-3 level, operate at an approximate utilization rate of only **[proprietary begin]** *** **[proprietary end]**. (*Id.*, ¶ 56).

23. With respect to the transport AT&T has deployed to its hub collocations (those connected to AT&T's fiber rings), the utilization of that transport is, in aggregate, only about **[proprietary begin]** *** **[proprietary end]**. In contrast, AT&T's interexchange and backbone utilizations are in the range of 75% to 80%. Thus, under AT&T's network assumptions, AT&T's local transport facilities are under-utilized by about **[proprietary begin]** *** **[proprietary end]**. (*Id.*, ¶ 58).

C. Factors Causing Under-Utilization of AT&T's Facilities And Negatively Impacting Its Ability to Self-Deploy Facilities

24. The reality that AT&T's existing local facilities are significantly under-utilized, despite AT&T's best efforts to market its services and to increase the amount of traffic handled by its own network should come as no surprise. As previously discussed, CLECs have had to build out their networks with no assurance of demand. But the risk of under-utilization inherent in this approach has been compounded by, and to a large degree reflects, significant and

unexpected impediments AT&T has faced, and continues to face, in its attempts to gather and aggregate sufficient levels of traffic to use its existing facilities efficiently, and to justify additional deployments.

25. One example of such an impediment is the hot cut process for provisioning UNE loops, which is plagued with problems that significantly impair AT&T's ability to provide service to customers over voice grade loops, and which substantially impedes AT&T's current ability to use its existing facilities, much less justify the deployment of additional switches, collocations or transport facilities. (Lesher/Frontera Dec., ¶¶ 63-68; Declaration of Ellyce Brenner, filed April 5, 2002, at ¶¶ 20-23).[2]

26. In this Reply Declaration, I focus the Commission's attention on four additional impediments. The first is the potential price-squeeze made possible by the ILECs' pricing flexibility, both with respect to the special access rates charged for transport facilities and the retail rates charged for local exchange services. The second is loop/transport use restrictions and the related prohibitions on commingling. The third is the ILEC Optional Pricing Plans ("OPPs") that will make it difficult for a CLEC economically to switch to loop/transport combinations at UNE prices even after the Commission rescinds its interim rules that now effectively preclude such combinations. The fourth impediment is the ease of ILEC entry into the long distance market, which will make it relatively easy for ILECs to siphon off revenue, and hence needed internally generated capital, from interexchange service competitors such as

[2] Other reasons discussed in my initial Declaration include the increasing prevalence of DLC loops in the ILECs' networks, and prevailing conditions in the capital markets. (Lesher/Frontera Dec., ¶¶ 69, 73-77).

AT&T and WorldCom, while these same entities struggle just to get a foothold in the local exchange market.

1. ILEC Price Squeezes

27. One of the more difficult issues impacting a CLEC's decision to self-deploy is the potential price-squeeze made possible by the ILECs' pricing flexibility, both with respect to the special access rates charged for transport facilities, and the retail rates charged for local exchange services. By applying an incomplete measure of competition for special access, the Commission has allowed the ILECs pricing flexibility for special access charges even where competitive alternatives are rare, and even where any existing alternatives do not provide sufficient (or any) replacements for the ILEC's service along a particular route. The result is that where pricing flexibility has been granted, some ILECs have *raised* their prices for special access. For example, Verizon and Bell South recently raised their special access rates in all of the MSAs in which they have obtained Phase II pricing flexibility. Such high rates for special access mask the true per-unit cost of the ILECs' transmission facilities, which makes it difficult for CLECs accurately to determine where facilities construction would be economic. This particularly impacts the price to lease a DS-1 tail, where the tail is comprised of both a loop and transport (*i.e.*, an EEL) between a customer's location and a CLEC collocation in a remote LSO.

28. Critically, the ILECs have also been earning not only very large, but increasing rates of return on interstate special access. Publicly available ARMIS data show that the revenues earned by major ILECs, reported by holding company, have increased (nearly quadrupled) from $3.5 billion in 1996 to $12.3 billion in 2001. The ARMIS data further show that the rate-of-return for the major ILECs on interstate special access, reported by holding

company, was, on average, 8% in 1996; 10% in 1997; 18% in 1998; 23% in 1999; 29% in 2000; and 38% in 2001. Thus, on average the ILECs' average rate of return on interstate special access increased by about 375% during this period. The rates of return on interstate special access of some RBOCs were even higher and are properly characterized as extraordinary. For example, SBC's rate of return on interstate special access rose from 13.2% in 1996 to 54% in 2001. Similarly, BellSouth's rate of return on interstate special access rose from 16.2% in 1996 to 49.3% in 2001.

29. Not only have the ILECs used their wholesale (special access) pricing flexibility to send potentially "false" economic signals to CLECs to build facilities, but also I am beginning to observe that the ILECs are using their retail pricing flexibility for local exchange services to compete against new entrants.[3] In other words, a CLEC that is considering whether

[3] In the recent application by Verizon for alternative regulation for local business services, the Massachusetts Department of Telecommunications and Energy ("DTE") found that the market for business services in Massachusetts was sufficiently competitive to grant Verizon some degree of pricing flexibility. However, the DTE, recognizing that CLECs must rely on inputs from Verizon to provide service, ordered Verizon to adopt TELRIC-based rates for its special access services. *Investigation by the Department of Telecommunications and Energy into the Appropriate Regulatory Plan to Succeed Price Cap Regulation for Verizon*, D.T.E. 01-31, Phase I, May 8, 2002. Notwithstanding the DTE's Order and the soundness of its reasoning, on June 5, 2000, in its compliance filing, Verizon stated that it did not intend to price its intrastate access circuits at UNE levels. *Verizon Massachusetts D.T.E. 01-31 Phase I Compliance Filing* ("*Compliance Summary*"), at 3. Specifically, Verizon stated:

> With respect to Private Line services, the Department stated that Verizon MA could obtain pricing flexibility *if it chose* to reduce Intrastate Special Access rates to UNE levels.

Id. (emphasis supplied). Although AT&T disagrees that the DTE's Order allows Verizon the option of not reducing special access rates, Verizon's decision to forego the pricing flexibility for business services for which it had asked, rather than adopt TELRIC-based rates for its special access services, suggests that it indeed intended to use its ability to flexibly price both the local

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to deploy transmission facilities cannot simply assume that the ILEC will maintain its artificially high retail rates for local service indefinitely. Because the ILEC almost always enjoys substantial advantages over CLECs in terms of per-unit costs, pricing flexibility allows it to reduce its retail rates at any time to a point between its own marginal cost and that of the CLEC. As a result, the CLEC's assumptions as to the retail rates it would be able to charge (and needs to defray the costs of deploying its own transport) can be readily undercut.

30. In short, the ILECs can "squeeze" CLECs such as AT&T in one of three ways. The ILECs can (1) raise the price of special access, thereby encouraging CLECs to build uneconomic transport facilities; (2) lower the retail price of their competing services so as to sharply reduce or eliminate any margin from the CLEC's local exchange services needed to pay for those new transport facilities (as well as the rest of the CLEC's network); or (3) if the CLEC does not build its own facilities, squeeze any profit margin out of the CLEC's local exchange services through the higher price (increased special access rates) they charge for the inputs necessary for the CLEC's services. Each of these scenarios significantly impairs competition.

31. And these impairments can be made even more subtle because the ILECs can make them route specific. The ILECs today typically price their higher capacity optical transport services closer to cost, because it is along such routes that CLECs are most likely to build their own facilities, and also where there are most likely to be other competitive alternatives. A CLEC generally can justify building such transport, however, only if it can

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retail service and the "wholesale" special access service to squeeze competitors out of the local market.

aggregate traffic from additional LSOs through the use of lower capacity transport links. Therefore, the ILEC can discourage entry – and recoup the lost profits from lowering its prices for *higher* capacity transport – by charging higher prices for the *lower* capacity transport that CLECs need to aggregate enough traffic to achieve reasonable utilization levels on their own facilities. CLECs have no way of countering this strategy, because (1) there simply are no competitive alternatives, especially on the lower capacity routes, and (2) the Commission's use restrictions and ban on commingling have effectively precluded any use of TELRIC-priced loop/transport UNE combinations to reach these additional LSOs. This real-world pattern in the ILECs' special access pricing largely explains why the CLECs' existing transport facilities are substantially under-utilized.

2. Loop/Transport Use Restrictions And Commingling Prohibitions

32. Another serious impediment to self-deployed CLEC transport facilities has been the Commission's "interim" use and commingling restrictions. Although I understand that the Commission's rules currently recognize – correctly – that loops and transport must be made available as unbundled elements, the Commission's use and commingling restrictions, particularly as interpreted and applied by the ILECs, have effectively precluded the use of loop/transport combinations altogether. These restrictions have had three principal effects: (1) to force CLECs to obtain loop/transport combinations at inflated special access rates, rather than at TELRIC-based rates in order to provide local service; (2) to prevent CLECs from reaching customers in a broader range of LSOs which, as a result, has shrunk the geographic scope of the markets a CLEC can serve; and (3) to prevent traffic aggregation at hub locations, which is necessary to create the conditions that may allow CLECs to deploy additional transport facilities.

33. Loop/transport combinations, or Enhanced Extended Links, are sometimes known as "EELs." Although I understand the Commission has held that CLECs may obtain, at UNE rates, loop/transport combinations that are used to provide a significant amount of local service, my experience is that the complex "safe harbor" procedures established by the Commission for meeting this requirement are so burdensome and difficult to satisfy that they effectively preclude use of these combinations in all cases.[4] The "safe harbors" depend on a circuit-by-circuit certification process which is inherently unworkable because CLECs' systems – including AT&T's – are not built to provide the kind of data necessary to support such record keeping requirements. As a result, CLECs are forced to incur excessive and discriminatory special access expenses even when loop/transport combinations are actually used to provide local exchange service.

34. The Commission's separate ban on the "commingling" of access and UNE traffic on the same facility is equally burdensome and further exacerbates the competitive harm caused by the use restrictions. All carriers, including ILECs and CLECs, seek to use facilities in a way that avoids unnecessary duplication. The large fixed costs associated with such facilities require that they be used to their maximum potential if economies are to be realized. As explained in the Reply Declaration of Anthony Giovannucci and Anthony Fea, when configuring

[4] Even after arriving at one of the "safe harbors" established by the *Supplemental Order Clarification*, carriers continue to be at risk of losing access to EELs at UNE prices. Several carriers have reported to the Commission that ILECs are seeking to conduct broad compliance audits without establishing that there is evidence to suggest that a requesting carrier has not met the criteria for providing a significant amount of local exchange service. Instead of using the limited audit rights established by this Commission to confirm a legitimate concern regarding compliance, ILECs have sought to undertake far-reaching audits that are more akin to "fishing

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a network and making decisions regarding the size and number of facilities needed to optimize network performance, the type of service or class of customer for the communications carried on the facilities makes no difference. In essence, an engineer views all traffic as a stream of electrons (or photons), with intervening spaces of dead time when no communication is occurring. The engineer's objective is to get as many electrons or photons as possible to pass over a particular facility per unit of time while still maintaining the integrity of the communications. (Giovannucci/Fea Reply Dec., ¶ 52).

35. The result of the Commission's use and commingling restrictions is that the CLECs must configure their network in a manner that is contrary to best engineering practices, and is inconsistent with the manner in which ILECs configure and use their own network facilities for themselves. In fact, the use and commingling restrictions effectively require CLECs to establish two parallel networks – one for local traffic and one for access traffic.

36. The reasons for this "parallel-network effect" are as follows. CLECs today typically provide local service using a combination of DS-1 channel terminations, multiplexing, and DS-3 transport, all purchased from interstate access tariffs. DS-1 loop facilities are generally associated with a single customer. As a result, in any given area, a CLEC such as AT&T may have some DS-1 loops that carry predominantly local traffic (for its local customers), and some that carry only special access traffic (for customers purchasing its long-

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expeditions" designed to burden the carrier and dissuade other carriers from legitimately using EELs. *See* Petition for Declaratory Ruling of NuVox, Inc., CC Docket No 96-98, DA 02-1302.

distance but not its local service). However, higher capacity transport and multiplexing facilities – the most efficient way to aggregate traffic – almost always carry some traffic that is eligible for conversion to UNEs and some that has been excluded (in AT&T's view improperly). As a result, the use and commingling restrictions effectively prevent a CLEC from converting *any* of those circuits to UNEs, unless it is willing to establish separate parallel networks in the central office – one for access traffic and one for UNE traffic.

37. The ILECs face no comparable restriction and thus are permitted to place any traffic on any facility. This helps them to achieve economies of both scale and scope in designing their networks. In sharp contrast, the commingling ban requires CLECs such as AT&T to adopt an extremely inefficient network architecture if they even attempt to use loop/transport combinations in the same way, *i.e.*, to set up two redundant sets of leased facilities: one solely for local services, which have been approved for treatment as UNEs, and one owned and operated for access services that have not been approved for UNE treatment.

38. These restrictions discourage CLECs from increasing their self-deployed facilities. The ILECs typically operate fiber transport facilities at the OC-48 level, which is the equivalent of 32,256 voice grade circuits. ILECs can justify the enormous fixed costs of fiber construction and associated electronics not only because they have a huge base of customers whose loops terminate at their LSOs, but also because the ILECs can use their facilities to service virtually all local demand *and* all interLATA demand, whether it is provided as access to IXCs or directly as the interLATA carrier following Section 271 relief. Serving this immense base of local and interLATA demand allows an ILEC to fill its fiber facilities to reasonable utilization levels.

39. CLECs, however, can only rarely match the ILECs' scale and scope efficiencies and incremental cost advantages on any individual route, regardless of whether the facility runs from the customer's premises to the serving wire center, from the serving wire center to a CLEC collocation within another LEC LSO, or from that LSO to the CLEC local switch. Given the small number of customers that most CLECs can expect to serve from a single LSO, there are only a few offices that by themselves have sufficient demand (multiple DS-3s of traffic) to justify construction of alternative fiber transport. Because of these realities, denying CLECs access to loop/transport combinations seriously inhibits facilities-based competition, because deployment of interoffice transport facilities between the CLEC's network and any ILEC's network is usually economic only where traffic from multiple LSOs can be aggregated to a hubbing point (in an ILEC LSO) and then connected to the contemplated facility. If the CLEC cannot use UNEs to gather traffic from additional LSOs -- and it cannot realistically do so under the existing use and commingling restrictions -- then its facilities-based entry plan is severely reduced (if not rendered completely uneconomic), because the CLEC will be forced either to pay excessive access rates or to build fiber facilities with enormous excess capacity (and substantial up-front costs that would dwarf the likely revenue stream) to the LSOs where it will have little traffic. In either case, these costs – all of which are expenses the ILECs do not face – would make it virtually impossible for a CLEC to price its retail service competitively with the ILEC's and still be profitable.

40. The Commission should therefore completely eliminate the use restrictions and ban on commingling. By permitting CLECs to use EELs to aggregate both local and access traffic, at UNE rates, CLECs will be able more efficiently to "fill in" the parts of their

networks where they do not have sufficient traffic and thus justify construction of more of their own facilities by creating efficient hubs.

3. OPPs

41. A third issue that threatens to impair AT&T from self-provisioning and using its facilities efficiently is the optional pricing plans ("OPPs") that ILECs have used effectively to lock-in CLECs to leased transport facilities at discounted special access rates, even though these discounted rates are higher than TELRIC rates. The ILECs have imposed significant conditions on the CLECs' ability to obtain the discounted OPP special access rates, such as a guaranteed traffic levels for a fixed number of years (generally between 3 and 7 years). In addition, the OPPs contain significant penalties for early termination.

42. These OPPs have presented CLECs such as AT&T with a Hobson's choice. On the one hand, if the CLEC does not sign up for an OPP, the special access rates it will pay for needed facilities (such as transport) create an even higher differential between the CLEC's and ILEC's costs, and also drive up the competitor's cost of service. On the other hand, if the CLEC does pay discounted special access rates for leased facilities under an OPP, and later tries to obtain the facilities instead at UNE rates (for example, when EELs become available with a lifting of the Commission's current use and commingling restrictions), the CLEC must pay steep termination penalties. Either way, the CLEC is impaired in its ability to build-out its network at UNE rates.

43. The two-year delay in resolving the use restriction problems established by the *Supplemental Order* and the *Supplemental Order Clarification* made these problems significantly worse. If the Commission had acted on its promised schedule, i.e., by June 30,

2000 – over two years ago – AT&T could have significantly limited the number of circuits subject to OPP penalties by now. Instead, today, both the embedded base of circuits, and all the new circuits ordered during the two years since 2000, are now subject to such requirements.

4. ILEC Entry Into The Long-Distance Market

44. Prevailing conditions in the capital markets are another serious impediment to AT&T's and other CLECs' construction of their own facilities. As both Chairman Powell and Commissioner Abernathy recently noted, the capital markets are effectively closed to CLECs at the present time, so self-provisioning is simply not an option for most CLECs. (*See* FCC News Release, FCC Chairman Michael Powell Appointed to President Bush's Corporate Fraud Task Force (July 9, 2002); Letter from Commissioner Kathleen Abernathy to Senators Earnest F. Hollings, Daniel K. Inouye, Byron L. Dorgan, and Ted Stevens at 4 (Mar. 5, 2002)).

45. ILECs, however, are not subject to these capital market difficulties.[5] Equally to the point, ILECs do not need to incur major capital costs to enter the long distance market in competition with carriers such as AT&T. Because of the Commission's resale rules -- and the robustly competitive market in long distance transport -- AT&T and other IXCs have had no choice but to lease long-distance circuits to the ILECs at very reasonable rates. Indeed, the wholesale rates for such long-distance circuits are deeply discounted, as compared to the average wholesale discount for local service resale (about 20%).

[5] The ILECs do not face comparable capital access issues. For example, as described above, they are earning extremely high rates of return on interstate special access services; in 2001, the (continued . . .)

46. This creates another impairment to CLECs' investment in their own facilities. Because of limitations in the capital market, CLECs such as AT&T must rely instead on internally-generated capital to fund much of their local network expansion and self-deployment of transport facilities. As ILECs are granted 271 authorizations to provide competitive long distance services, however, they will begin to draw revenue from competing long distance providers such as AT&T and WorldCom and thereby diminish their ability to generate capital internally. At the same time, AT&T, in its role as a CLEC, is faced with the daunting prospect of substantial capital costs, high rates for leased facilities, and major operational issues just to gain a foothold in local exchange markets and generate some revenue. This disparity in competitive prospects and access to capital (internally generated as well as external) is itself a substantial impediment to CLEC self-provisioning.

D. Implications For Competition

47. Given the realities of the contrasting economies of scale and scope faced by ILECs and CLECs in their respective local exchange networks, the substantial under-utilization that AT&T (and other CLECs) are experiencing for their deployed facilities, and the serious operational and business impediments CLECs face in economically deploying and efficiently using their own facilities described above, the only way in which present low levels of local exchange competition can even be maintained, much less increased, is if CLECs have *increased* ability to fill out their networks and aggregate and transport traffic using facilities leased from ILECs at TELRIC, cost-based rates. Indeed, even then it is likely, given current

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(. . . continued)
major ILECs reported (on a holding company basis) an average rate of return on interstate
(continued . . .)

utilization levels and capital constraints, that AT&T will have to re-rationalize its network footprint in many locations by, for example, reducing the number of its collocations. It should be noted, however, that such actions are designed to increase, not decrease, the percentage of traffic carried on AT&T's own self-deployed facilities so as to reach efficient levels of traffic that approach the ILECs' efficiencies. But such actions cannot even be considered, much less be effective, without assurances of access to transmission UNEs at TELRIC rates and under reasonable conditions.

48. This is one of the principal reasons why ILEC proposals for de-listing UNEs are so misguided. I address the details of those proposals below, but my point here is simply that without greater *practical* access to UNEs than exists today, the ability of substantial market segments to benefit from local exchange competition will be sharply diminished.

IV. SBC'S AND QWEST'S PROPOSED TRIGGERS FOR DE-LISTING UNES

49. It is against this backdrop of network economics, and regulatory and business impairments, that the Commission must consider ILECs' proposed "triggers" for de-listing facilities from required provision as UNEs. SBC, for example, requests that the Commission de-list all loops and transport at DS-3 and above level immediately, and that it de-list DS-1 loops and transport at wire centers that (1) have two or more fiber-based collocators, or (2) have at least 15,000 business lines. (SBC at 88). Qwest proposes that the Commission de-list dedicated transport in any MSA that has met the triggers for pricing flexibility. (Qwest at 32, 35-36).

(. . . continued)
special access services of 38%.

50. These triggers do not address the real-world circumstances that determine whether or not a CLEC would be impaired without unbundled loops or other transport. First, the complete de-listing of all DS-3 transport (as proposed by SBC) would be inappropriate, because, as I have already explained, a CLEC would need to aggregate enormous amounts of demand – something it cannot currently and practically accomplish -- before it could deploy its own transport facilities on that route while attaining per-unit cost approaching that of the ILEC. The current inability of an individual CLEC to aggregate sufficient demand, and the ILEC's unit cost advantages largely derived from its prior monopoly position, result in insuperable cost disadvantages for CLECs.

51. Second, the de-listing of DS-1 transport would not be appropriate under any circumstances. The suggested *Phase II Pricing Flexibility Order* trigger of two or more fiber-based collocators, which lies behind the SBC's suggested DS-1 trigger and Qwest's separate proposed trigger, has no bearing on the relevant impairments. The Commission designed the pricing flexibility collocation test to be an administratively simple, bright line rule that would permit the ILEC to adjust its special access prices to respond to nascent competitors at an early stage of competitive entry, without having to wait for the ILEC to lose market power. *Pricing Flexibility Order*, ¶¶ 84, 90. But the mere existence of "fiber-based" collocations has no direct bearing on a proper impairment analysis. Whether any particular CLEC can economically build transport depends on whether *that particular CLEC* has enough traffic to increase its scale economies to something approaching those of the incumbent on *that* route and whether it can overcome other barriers to entry. Further, and perversely, experience with the pricing flexibility triggers has shown that incumbents, such as Verizon and Bell South, have used this factor as an

excuse to raise their special access rates in all of the MSAs in which they have obtained Phase II pricing flexibility. This pricing behavior exacerbates CLECs' economic problems in developing a competitive alternative network, because special access rates are generally priced far in excess of TELRIC and thus *reduce* the situations where competitive market entry is justifiable for an otherwise facilities-based competitor. Further, AT&T's experience is that there is essentially no viable wholesale transport market, especially at the DS-1 level. (Giovannucci/Fea Reply Dec., ¶¶ 9-20). Thus, adopting this proposed trigger and forcing CLECs to use much higher priced special access would be disastrous for competition.

52. Finally , the second prong of SBC's proposed trigger, de-listing DS-1 transport in any wire center in which there are 15,000 business lines (*see* SBC at 92), would be equally disastrous. The fact that there are 15,000 business lines in a wire center has nothing to do with whether any particular CLEC could economically build or use alternative transport facilities. Even if a CLEC could obtain a 25% share of the traffic in such an office, it would only require about two DS-3's of transport -- too little to support construction of its own facility. And as stated above, there are virtually no alternatives available for DS-1 level transport.

V. UNBUNDLED SWITCHING

53. The ILECs have claimed UNE-P deters CLECs from investing in their own facilities. Indeed, they claim that customers that CLECs serve initially via UNE-P will never be migrated to the CLECs' own facilities. The claim appears to be based on events in New York where, according to SBC, "AT&T and WorldCom's platform-dependent strategy in New York – which has resulted in over a million customers – has apparently yet to produce a single customer converted to these carriers' own facilities." SBC at 77.

54. This claim ignores that in New York, AT&T Business Services has only very recently provided service using UNE-P. Hitherto, AT&T has used TSR in New York initially to serve business customers with a view to later migrating them to its own facilities. AT&T has in fact migrated at least 20,000 TSR customers to its own facilities in New York and there is no reason to think the result will be any different with UNE-P. Moreover, where the economic circumstances warrant it, AT&T plans to convert additional customers to its own facilities. AT&T's current business plan is to focus on serving as many of its existing customers as possible over its own switches, and to use UNE-P as an initial device to obtain new customers, followed as soon as possible by conversion to service on an AT&T switch (and possibly other facilities) so long as this is a practically available option and can be economically justified.

55. AT&T's ability to pursue this business plan, however, depends upon a number of factors, including (1) a satisfactory loop cutover process that does not pose a risk that customers will suffer service outages and provisioning delays[6]; (2) reasonable and cost-based non-recurring charges for the loop cutovers[7]; (3) attainment of a sufficient volume of customers in an area to justify investment in AT&T's own facilities; (4) the availability of collocation at

[6] Until the availability of a nondiscriminatory and cost-effective electronic loop provisioning process, this requires an established process for the bulk conversion of customers' loops from the ILEC's switch to a competitor's switch.

[7] Extraordinarily high non-recurring charges for migrations simply make it uneconomic to transfer customers to AT&T's own facilities. In some cases, the loop cutover non-recurring charges are so high that they cannot be recovered over the average life of a customer account.

reasonable rates; (5) the availability of cost effective transport to connect its customers' loops to AT&T's switch;[8] and (6) the absence of use and commingling restrictions.

[8] With regard to connectivity costs, AT&T can generally achieve cost savings by handling "backhaul" traffic over its own facilities, or "on net." However, even where the economics might otherwise permit, AT&T and other CLECs are impaired in their ability to deploy such facilities for practical reasons, such as obtaining ROW.

VERIFICATION

I, Michael E. Lesher, declare under penalty of perjury that the foregoing is true and correct. Executed on July 16, 2002.

Michael E. Lesher

Name